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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,419	11/01/2000	Eric Cohen	US000287	1395

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P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
JERABEK, KELLY L	

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/703,419	COHEN ET AL.	
	Examiner	Art Unit	
	Kelly L. Jerabek	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 November 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claim 2 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Independent claim 1 already includes the limitation that the camera is integrated into the hand-held device.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-7, 9, and 12-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Cheong US 6,005,609 in view of Saburi US 6,556,235.

Re claim 1, Cheong discloses in figures 1-7 a method for automatically tracking an object of interest using a video camera integrated into a videophone. It can be seen in figure 1 that the tracking method includes the steps of: selecting an input image (ST 100, 102), determining a correlation area shape (ST 104, 112), a step for extracting an

area (ST 114, 116), estimating movement (ST 120), and driving a motor (ST 122) (col. 3, lines 20-27). The tracking method continuously detects relative movement between the videophone and the object of interest through the use of a correlation calculator (170) and a movement estimator (180) (col. 5, line 23 – col. 7, line 49). The estimated movement calculated by the movement estimator (180) is then transferred to controller (150) in order to operate the motor (114) to drive the camera (104) so that it will track a moving object (col. 7, lines 17-27). Therefore, it can be seen that a setting (motor driving the camera) is continuously adjusted in response to detected movement so as to maintain a desired tracking of the object of interest in order to provide a video image of the object. Although Cheong discloses all of the above limitations he does not distinctly state that the videophone is portable or hand-held.

Saburi discloses in figures 1-3 a portable videophone unit. The portable videophone unit (20) includes a display (21), various keys (23), and a camera (22) (col. 3, lines 32-54). Therefore, it would have been obvious for one skilled in the art to have been motivated to include the capability of making a videophone portable or hand-held as disclosed by Saburi in the videophone capable of automatically tracking an object of interest as disclosed by Cheong. Doing so would provide a means for allowing a user to transmit and receive images at a variety of locations (Saburi: col. 1, lines 6-9).

Re claim 2, see claim 1.

Re claim 4, the motor driver (114) of the videophone disclosed by Cheong drives the motor (112) based on the movement estimated by the movement estimator (180) to move the camera (104) so that the camera can track a moving target (col. 7, lines 17-27). Therefore, since the motor physically pans the camera it can be seen that the camera is a physically adjustable camera.

Re claim 5, the motor driver (114) of the videophone disclosed by Cheong drives the motor (112) based on the movement estimated by the movement estimator (180) to move the camera (104) so that the camera can track a moving target (col. 7, lines 17-27). Therefore, since the motor is electronically driven to pan the camera the examiner is also reading the camera as being an electronically adjustable camera.

Re claim 6, the motor driver (114) of the videophone disclosed by Cheong drives the motor (112) based on the movement estimated by the movement estimator (180) to move the camera (104) so that the camera can track a moving target (col. 7, lines 17-27). Therefore, it can be seen that the camera is driven to pan the camera in order to track an object.

Re claim 7, see claim 1.

Re claim 9, the portable videophone (20) disclosed by Saburi includes a central processing unit (1) that controls the entire unit (col. 4, lines 40-43). Therefore, the examiner is reading the portable videophone (20) as a portable computer.

Re claim 12, the motor driver (114) of the videophone disclosed by Cheong drives the motor (112) based on the movement estimated by the movement estimator (180) to move the camera (104) so that the camera can track a moving target (col. 7, lines 17-27). The movement estimation is calculated based on a former image. Therefore, it can be seen that the camera setting is adjusted base on an output of an image processing operation applied to an image generated by the camera (movement estimation).

Re claim 13, the correlation calculator (170) of the videophone disclosed by Cheong calculates a correlation area based on a former image and the current image in order to determine a target (col. 6, line 60 – col. 7, line 16). The examiner is reading this feature as an orientation determination. Next, movement is estimated by the movement estimator (180), and the motor driver (114) drives the motor (112) based on the movement estimated by the movement estimator (180) to move the camera (104) so that the camera can track a moving target (col. 7, lines 17-27). After this the newly

output image signal is proved to the A/D converter (col. 7, lines 32-41). The examiner is reading this feature as an image processing operation. Therefore, the camera setting is adjusted based on a hybrid combination of an orientation determination opeation and an image processing operation.

Re claim 14, see claim 1.

Re claim 15, see claim 1. The videophone disclosed by Cheong includes a controller (150) for controlling the operations of the videophone according to a tracking mode and a non-tracking mode (col. 5, lines 1-22). Therefore, it can be seen that the videophone includes a program for tracking an object of interest using a video camera integrated into a videophone as disclosed in claim 1 above.

Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Cheong in view of Saburi as applied to claim 1 above and further in view of Yuyama et al. US 5,612,732.

Re claim 3, Cheong in view of Saburi teaches all of the limitations of claim 1, but does not state that the camera is part of a module insertable into the hand-held device.

Yuyama discloses in figures 7 and 8 a portable television receiver with a removable camera. The portable television receiver is a hand-held unit and the camera may be inserted into it or removed (col. 11, lines 8-60). Therefore, it would have been obvious for one skilled in the art to have been motivated to include the removable camera unit as taught in Yuyama in the videophone disclosed by Cheong in view of Saburi. Doing so would provide a means for inserting the camera into the hand-held terminal and removing the camera from the hand-held terminal according to the desired use of the camera (Yuyama: col. 11, lines 8-11).

Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Cheong in view of Saburi as applied to claim 1 above and further in view of Yerazunis et al. US 6,600,657.

Re claim 8, Cheong in view of Saburi teaches all of the limitations of claim 1 above. However, the neither Cheong nor Saburi specifically state that the hand-held device is a personal digital assistant further referred to as a PDA.

Yerazunis discloses in figure 8 a PDA including a digital camera. PDA's including digital cameras are well known and used in the art as disclosed by Yerazunis. PDA's have the capability of storing and manipulating a wide variety of information such as still images taken by a camera or video objects (col. 4, lines 15-25). Therefore, it would have been obvious for one skilled in the art to have been motivated to replace the handheld videophone disclosed by Cheong in view of Saburi with the PDA taught by

Yerazunis. Doing so would provide a means for providing a portable PDA including a camera for acquiring images (Yerazunis: col. 2, lines 25-27).

Claims 10-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Cheong in view of Saburi as applied to claim 1 above and further in view of Vincent 6,195,122.

Re claims 10-11, Cheong in view of Saburi includes all of the limitations of claim 1 above. However, the combination of the Cheong and Saburi references does not disclose an orientation determination device such as a gyroscope

Vincent discloses in figure 1 a tracking data acquisition unit (105) attached to a video camera (120). As shown in figure 2, the tracking data acquisition unit (105) includes two gyroscopes (400, 410) for measuring the rotation of the camera along the x and y axes in order to determine the orientation of the camera (col. 6, lines 1-15). Therefore, it would have been obvious for one skilled in the art to have been motivated to include the gyroscopes (400 and 410) for measuring the rotation of the camera as disclosed by Vincent in the portable videophone capable of tracking an object disclosed by Cheong in view of Saburi. Doing so would provide a means for sensing all rotational motions of a video camera in order to determine the orientation of the camera and the distance to the object (Vincent: col. 2, lines 36-45).

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on **(571) 272-7308**. The fax phone number for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at **(571) 273-7312**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600